

Application No.: 10/659,133  
Amendment dated: April 28, 2005  
Reply to Office Action dated: January 28, 2005

### **AMENDMENTS TO THE CLAIMS**

1. (Cancelled)
2. (Currently Amended) An apparatus for sharing a resource, comprising:
  - a resource having a plurality of elements;
  - ~~an access controller coupled to said resource;~~
  - ~~at least first and second components coupled to said access controller and adapted to~~  
access the elements of said resource; and
  - an access controller ~~adapted~~ coupled to said resource and said at least first and second  
components to store a first mask value, wherein access to the elements of said resource by said  
first and second components is controlled based on said first mask value.
3. (Original) The apparatus of claim 2 wherein said first mask value represents which of the elements of said resource are available for access for a selected component.
4. (Original) An apparatus for partitioning a memory resource, comprising:
  - a memory resource having a plurality of addressable blocks;
  - first and second components adapted to access said memory resource; and

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a register adapted to store a first mask value, wherein access to addressable blocks of said memory resource is controlled based on said first mask value.

5. (Original) The apparatus of claim 4 wherein said memory resource is a cache memory.

6. (Original) The apparatus of claim 5 further comprising:

a processor coupled to said cache memory, wherein said first component includes execution of instructions by said processor from a first thread and said second component includes execution of instructions by said processor from a second thread.

7. (Original) The apparatus of claim 6 wherein said first mask value represents which of the addressable blocks of said cache memory are available for eviction.

8. (Original) The apparatus of claim 7 wherein a first mask value is provided for each of said components, said first mask values indicate which of the addressable blocks of said cache memory are available for eviction for one of said components and which of the addressable blocks of said cache memory are available for eviction for at least two of said components.

9. (Original) The apparatus of claim 8 wherein an eviction array is provided indicating the least recently used addressable block of said cache memory and a second mask is provided, said

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second mask value selecting which bits of said eviction array are used in controlling which of the addressable blocks of said cache memory are available for eviction.

10. (Previously Presented) The apparatus of claim 6, wherein an eviction array is provided indicating a least recently used addressable block of said cache memory and wherein said first mask value is an auxiliary mask value and said auxiliary mask value represents which of the addressable blocks of said cache memory are available for eviction and selects which bits of said eviction array are used in controlling which of the addressable blocks of said cache memory are available for eviction.

11. (Currently Amended) A method for sharing a resource having a plurality of elements between at least first and second components, comprising:

controlling, with an access controller coupled to said at least first and second components, which of said at least first and second components are able to access which

elements of said resource; and

storing a first mask value, wherein access to the element of said resource is controlled based on said first mask value.

12. (Cancelled)

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13. (Original) The method of claim 12 further comprising:

determining which of said first and second components is accessing said resource; and  
determining which of the elements of the resource are available for access by the component  
accessing said resource based on said first mask value.

14-17 (Cancelled)

18. (Currently Amended) A set of instructions residing in a storage medium, said set of  
instructions capable of being executed by a processor for sharing a resource having a plurality of  
elements between at least first and second components comprising:

controlling, with an access controller coupled to said at least first and second  
components, which of said at least first and second components are able to access which  
elements of said resource; and

storing a first mask value, wherein access to the element of said resource is controlled  
based on said first mask value.

19. (Cancelled)

20. (Previously Presented) The set of instructions of claim 19, wherein the execution of said  
set of instructions further comprises:

determining which of said first and second components is accessing said resource; and

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determining which of the elements of the resource are available for access by the  
component accessing said resource based on said first mask value.

21-24 (Cancelled)